

CLAIMS

1. A process for the treatment of synthesis gas to increase content of hydrogen and/or carbon monoxide in the gas comprising the step of contacting the synthesis gas with a catalyst comprising oxides of manganese and zirconium, which metals are present in the catalyst in a molar ratio Mn/Zr of between 0.05 to 5.00 the oxides constitute of at least 50% by weight of the catalyst in its reduced form.
2. A process as claimed in claim 1, wherein the catalyst further comprises a metallic component selected from copper, silver, gold, palladium and platinum and/or metal oxides selected oxides of transition metals from Group 3 to 8 of the Periodic Table and the lanthanides.
3. A process as claimed in claim 2, wherein the metallic component is copper.
4. A process as claimed in claim 2, wherein the metal oxides are selected from oxides of yttrium, titanium, vanadium, niobium, chromium, iron, cerium, lanthanides and mixtures thereof.
5. A process as claimed in claim 1, wherein the catalyst is in form of a thin layer supported on a geometrical body placed in at least part of a passageway through which the synthesis gas is transported.

6. A process as claimed in claim 1, wherein the catalyst is in form of a thin layer supported on at least part of inner wall of a passageway through which the synthesis gas is transported.

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7. A process as claimed in claim 1, wherein the catalyst is in the form of pellets, extrudates, tablets, monoliths and geometrical bodies.

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8. A process as claimed in claim 1,
wherein the synthesis gas is an effluent stream selected from catalytic steam reforming of hydrocarbons, autothermal steam reforming of hydrocarbons, secondary steam reforming of hydrocarbons and gasification of hydrocarbons, gasification of coal or fuel-processing for the
15 production of energy.